CHAPTER 12

STOKES LITTER

12-1. **GENERAL.** This chapter contains information about the corrosion-resistant steel litter used onboard Army watercraft (see Figure 12-1).

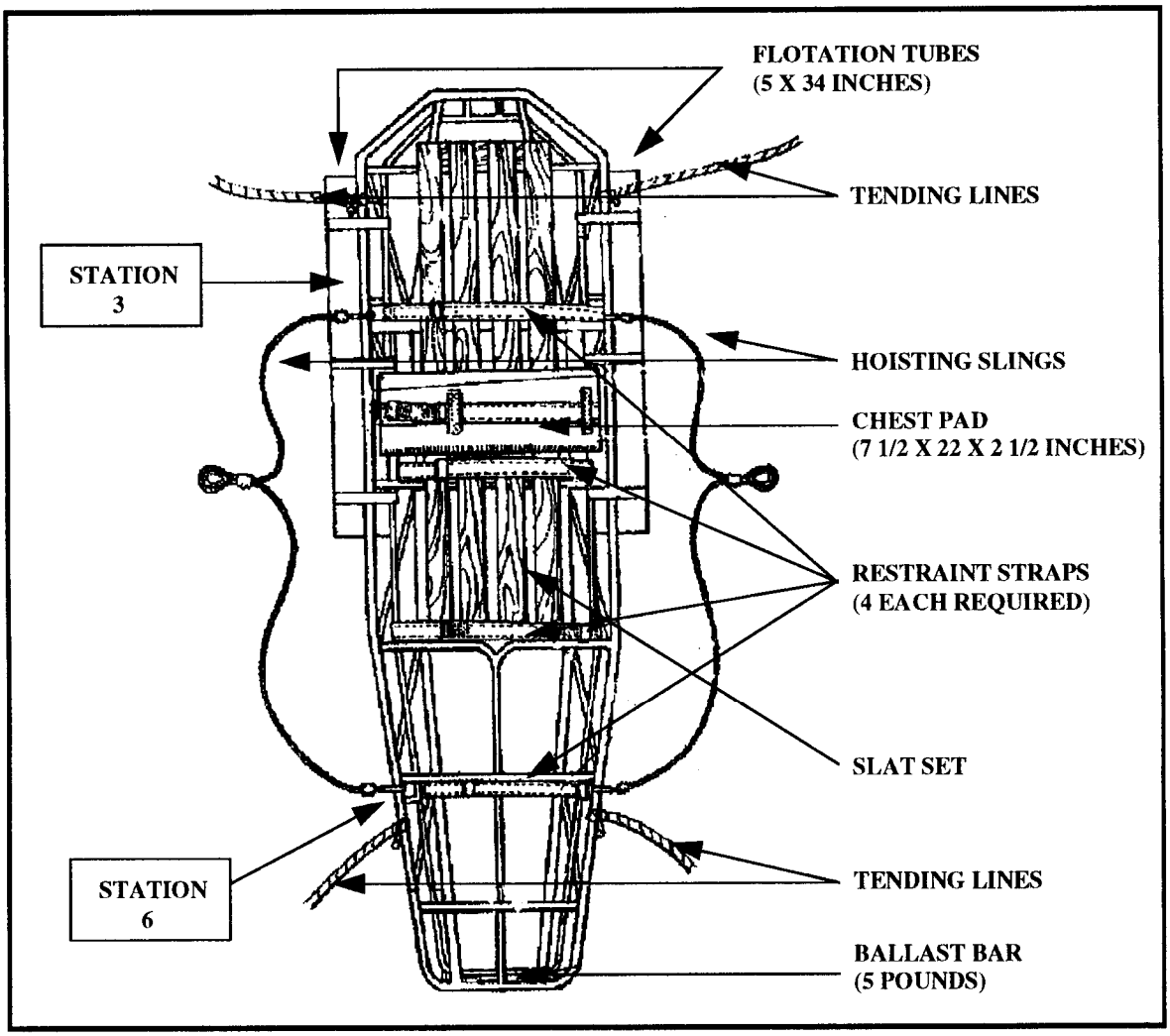

Figure 12-1. Stokes litter (with modifications)

12-2. **CONFIGURATION.** Stokes litters shall be configured for their intended application and shall not be used otherwise.

a. **Ashore.** Stokes litters used for transporting a person for land operations require no modifications. Steel or aluminum litters may be used.

b. **Over Water.** Stokes litters used for transporting a person onboard boats, over the water, or retrieving a person overboard, shall be configured with a flotation kit assembly (includes

tow flotation tubes with covers, one chest pad with cover, five restraint straps, and one ballast bar), slat set, hoisting slings, and tending lines.

c. **Hoisting.** Stokes litters intended for shipboard or helicopter hoisting operations (using the ship's or aircraft's hoist) shall be equipped with the standard hoisting sling.

WARNING

Only steel litters are authorized for hoisting operations.

NOTES

Class "A" Army watercraft shall maintain at least one corrosion-resistant steel Stokes litter rigged for over water use.

Class "B" and "C" Army watercraft may maintain at least one corrosion-resistant steel Stokes litter rigged for over water use.

Supply information for procurement of the Stokes litter, slat set, flotation kit assembly, and hoisting sling is shown in the supply information paragraph at the end of this chapter.

12-3. **MODIFICATIONS.** The following paragraphs describe modifications to the Stokes litter.

a. **Flotation Tubes, Chest Pad, and Ballast Weight.** To attach the flotation tubes, chest pad, and ballast weight, complete the following steps (see also Figure 12-1):

WARNING

It is essential that the two flotation tubes, chest pad, and ballast bar be positioned at the precise locations on the litter as illustrated in Figure 12-1. If the tubes are positioned too high or too low, the litter may not right itself or keep the patient's head above water.

- Route one end of the flotation tube webbing tie over the top (¾-inch) litter tube and the other end of webbing tie under the lower (3/8-inch) litter tube. Be sure to position ties over the outside of the flotation tube and in the location illustrated in Figure 12-1. Tie or connect ends of webbing together using a square knot or buckles (if so equipped). Tack free ends of webbing using 6-cord nylon thread.

- Route chest pad strap through retainer straps on cover and attach to the lower (3/8-inch) litter tube as illustrated in Figure 12-1.
- To make litter self-righting, attach a 12-pound ballast bar to foot of litter (see Figure 12-1).

b. **Hoisting Sling.** Fabricate the hoisting sling as shown in Figure 12-2 and Figure 12-3, page 12-5. Attach the sling as illustrated in Figure 12-1.

WARNING

Use two swaging sleeves on each end of the hoisting sling when attaching it to the litter tube.

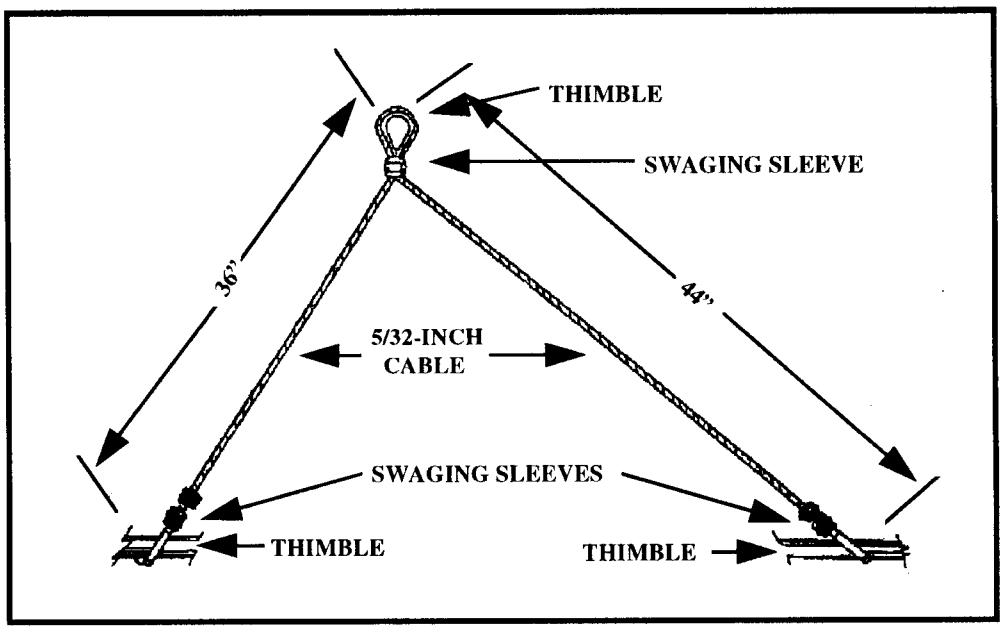

Figure 12-2. Fabrication of hoisting sling for stokes litter

c. **Restraint Straps.** Attach four restraint straps in the positions shown in Figure 12-1. To attach straps to the 3/8-inch tube, pass loop end of restraint strap around outside and under tube, passing strap between wire mesh and tube. Pass opposite end through loop and pull strap tight (see Figure 12-4, page 12-6).

d. **Tending Lines.** Stokes litters shall have tending lines installed so the litter can be held in position and recovered from alongside a vessel for rescue from the water. Use manila line of sufficient length to allow lowering of litter to the water. Attach tending lines, using an eye splice, to the ¾-inch tubes at stations 3 and 6 of litter (see Figure 12-3).

12-4. **INSPECTION.** Stokes litters and associated equipment shall be inspected after each use but not less than once every 3 months. The latest date of inspection and proof test shall be stenciled

on the bottom of the slat set (in trunk section of litter). The stencil shall be of ½-inch letters in the format shown below:

PROOF TEST	INSPECTED
(month/year)	(month/year)

The following paragraphs contain requirements for inspection of the litter, flotation equipment, hoisting sling, and tending lines.

a. **Litter.** Inspect litter for cracked welds, cracked tubes, rust, pinholes, security and condtion of wire mesh, and evidence of wear on the sling attachment points. Inspect restraint straps for security, condition, and quantity (minimum of four per litter).

b. **Flotation Equipment.** After use in salt water, flotation equipment shall be rinsed in fresh water and dried before storage. Flotation equipment shall be thoroughly inspected for wear, rotting, mildew, mold, tears, cuts, broken stitches, and frayed fabric.

c. **Hoisting Sling.** The hoisting sling shall be inspected for corrosion, fraying, or deterioration.

d. **Tending Lines.** Inspect manila tending lines for condition and security. Lines that are frayed or show signs of weathering or rot shall be replaced.

12-5. **PROOF TESTING.** Litters equipped with a hoisting sling shall be proof tested every 6 months. To proof test litter, complete the following steps:

- Distribute 400 pounds evenly in the litter and hoist clear of the deck.
- With litter suspended, inspect litter and sling for deformities.
- Inspect sling for even load distribution at all attachment points.

12-6. **MAINTENANCE.** Maintenance of the litter, hoisting slings, flotation equipment, and chest pad consists of minor repairs, replacement, and cleaning. To maintain equipment, complete the following steps:

- Repairs for aluminum litters are limited to removal of surface corrosion and application of primer to rework areas. Cracked welds or cracked tube members are cause for replacement.

WARNINGS

No weld repairs shall be attempted on aluminum litters.

Aluminum litters shall be marked “NOT TO BE USED FOR HOISTING OR HIGH-LINE OPERATIONS.”

- Weld repairs for steel litters are permitted using heliarc method only. After a weld repair, litter shall be proof tested as described in paragraph 12-5.
- Replace hoisting slings that show signs of corrosion, fraying, or deterioration.
- After each use in salt water, remove flotation collar and chest pad from the litter, rinse in fresh water, and dry before reinstallation.

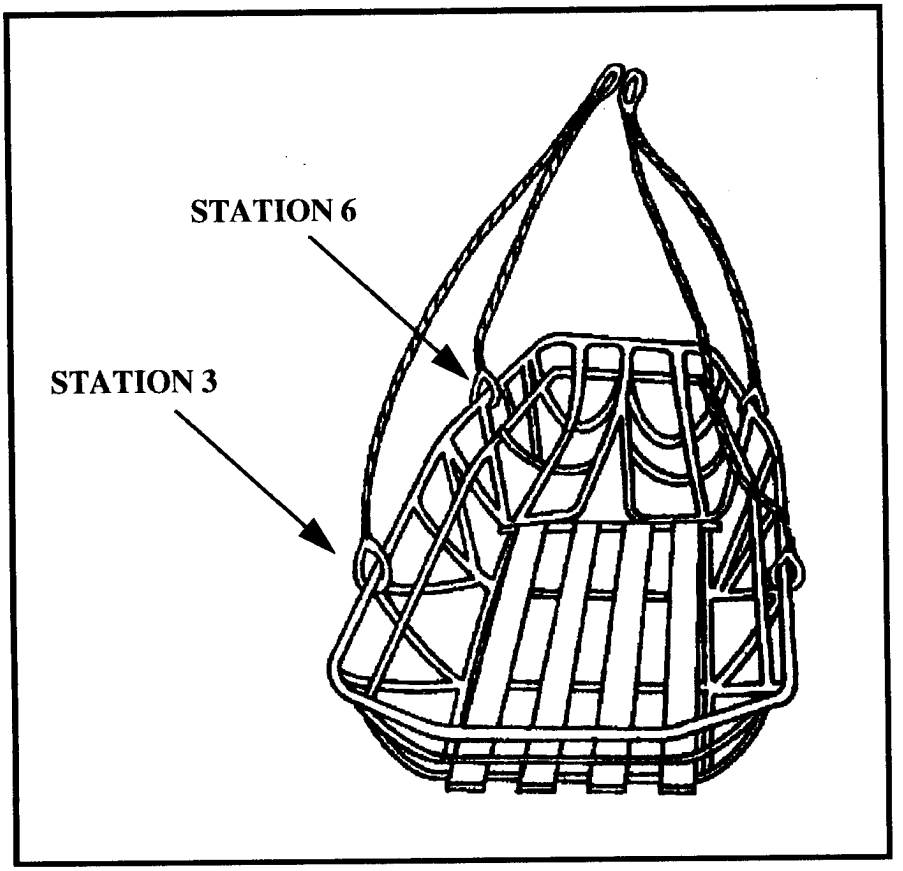

Figure 12-3. Stokes litter with hoisting sling attached (flotation removed for clarity)

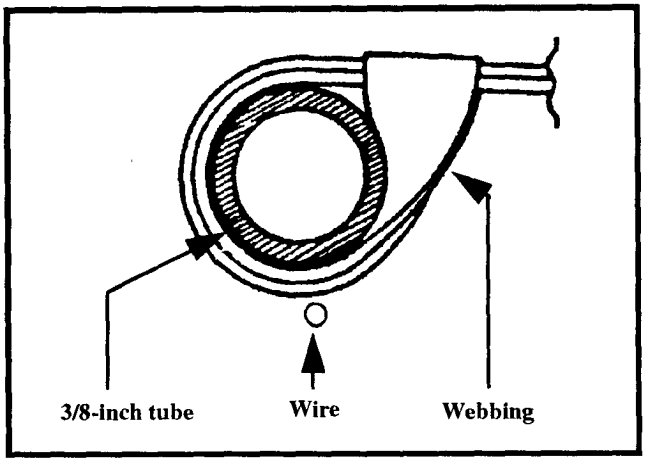

Figure 12-4. Attachment of litter restraint strap to stokes litter tubes

12-7. **PROCUREMENT.** The following are the NSNs for the litter and related items.

- Litter, Rigid Stokes, Type I, (with leg separator) (NSN 6530-00-042-8131).
- Flotation Kit Assembly (includes two flotation tubes with covers, one chest pad with cover, five restraint straps, and one five pound ballast bar) (NSN 6545-01-155-1598).
- Sling, Rescue Helicopter Hoisting Cables, PN #190 (NSN 1670-01-226-5300).
- Rope, Manila (tending line) (NSN 4020-00-289-8616).
- Litter, SAR MEDEVAC (canvas litter with no sides and comes with flotation equipment. Must also order the above mentioned sling assembly) (NSN 6530-01-187-0104).
- Slat Set (NSN-6530-01-078-0585).
- Basket, Stokes Rigid (wire mesh insert) (NSN 6530-00-926-2278).
- Flotation Tube Assemblies (includes two flotation tubes with covers) (NSN 4220-01-155-1599).

  Chest Pad Assembly (includes pad with cover and one restraint strap) (NSN 4220-01-155-1600).
- Bar, Ballast (NSN 4220-01-155-1601).
- Restraint Set, Litter Patient (NSN 6530-01-168-1130).
- Thread, Nylon, 6-Cord (NSN 8310-00-559-5211).
- Strap, Webbing (NSN 6530-00-784-4315).